

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph starting at page 6, line 9 and ending at page 7, line 3, with the following:

The instrument 12 comprises a housing, represented by the outline ~~[[24]]~~ 25, including a control circuit in the form of instrumentation electronics 26 connected to the primary element 14. The control circuit 26 measures the process variable using the primary element 14 and develops a control signal on a line 36 representing the process variable. An output circuit 28 is connected to the terminals 16 and 18 for connection of the instrument 12 in the two-wire process loop 10. Particularly, the output circuit 28 controls current on the loop 10 in accordance with the control signal on the line 36. A power supply circuit 30 is connected to the output circuit 28 and the control circuit 26 for receiving power from the two-wire process loop 10 and supplying power to the control circuit 26. The power supply circuit comprises cascaded charge pump circuits 32 and 34. As noted above, industrial process control loops commonly power the loop devices from a source of 24 volt DC. However, the full 24 volt DC is rarely available to the device. The current loop may include a sense resistor of several hundred Ohms. The 24 volt DC supply may itself have a tolerance on the order of 5%. Intrinsic safety barriers may further reduce the available loop voltage. As a result, it is not uncommon to require device operation with as little as 15 volts DC available for operation.